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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/594,356

08/04/2008

Alfred Kuttenger

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EXAMINER

ILAN, RUTH

ART UNIT

PAPER NUMBER

3616

MAIL DATE

DELIVERY MODE

01/04/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/594,356	KUTTENBERGER ET AL.	
	Examiner	Art Unit	
	Ruth Ilan	3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8 and 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/2/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 11/2/2010 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. Since a copy of JP 2002-529292 was not provided, this reference has been lined through.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 8 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foo et al. (US 6,095,554) in view of Davis et al. (US 5,882,034) and further in view of Feldmaier (US 4,842,301.) Foo et al teaches a device for triggering a personal protection device in a vehicle including an inertial sensor system (50, 52, 22 or 34) situated in a first location in a vehicle. With respect to claim 8, the first location is either the B pillar, col. 3, line 50 or can be the tunnel, col. 5, line 40.) A processor (13) is situated in a second location and the airbag to be controlled (airbag module 18, see col. 8, line 50) which is triggered as a function of a second signal (92) is situated in a third location. The processor is a central computer (see col. 3, line 40.) The inertial sensor system has a sensor signal pre-evaluation (see col. 4, lines 12-14 and col. 5, lines 8-

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10.) The difference between Foo et al. and the claimed invention is that Foo et al. does not specify that the firing circuit control is located with the airbag in the third location. It is well known in the vehicle airbag art to include local firing circuit control with the individual igniters located with the airbag. Davis et al. teaches one such arrangement, And includes the benefits of reducing costs, and increasing performance and control (see col. 1, lines 35-38.) Additionally, the use of the firing circuit control located remotely with the airbag decreases the risk of electromagnetic pickup on the wiring causing inadvertent deployment (see col. 2, lines 39-46.) Based on the teaching of Davis et al., it would have been obvious to one having ordinary skill in the art at the time of the invention to include firing circuit control remotely (i.e. at the third location) in order to reduce costs, and decrease the risk of inadvertent deployment. The other difference between Foo and the claims as amended is that Foo does not specifically teach that processor is not located on the vehicle tunnel, or as amended at one of the trunk, under a vehicle seat, in a vehicle seat or a vehicle roof. Foo does however suggest that it is contemplated that the processor is mounted separately from the accelerometers 50 and 52 which are preferably mounted on the vehicle tunnel (see col. 5, lines 40-42.) Feldmaier teaches that a variety of mounting locations for a processor other than a vehicle tunnel and separately from the sensor input are contemplated, including the trunk (see col. 3, line 68.) Because Foo and Feldmaier teach airbag controls, with separate sensor locations, it would have been obvious to one having ordinary skill in the art at the time of the invention to mount the processor of Foo in the location suggested by Feldmaier in order to achieve the predictable result of a readily mounted processor.

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Regarding claim 13 the Examiner takes Official Notice that the use of a BUS system are well known electrical expedients in the automobile art. It would have been obvious to one having ordinary skill in the art at the time of the invention to use these types of connections, as a person with ordinary skill has good reason to pursue the known options within his or her technical grasp. In Applicant's most recent remarks, Applicant has traversed the Examiner's assertion that BUS systems and plug-in components are well known and requested evidence. Lich et al., Pavlish, Schondorf et al., Caruso et al., Morell, Bentele-Calvor et al., Mathony, and Nitschke et al., among countless others teach that it is well known to communicate sensors, firing circuits and controllers via a BUS system.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Foo in view of Feldmaier as applied to claim 8 above, and further in view of Skoffjanec (US 2002/0060448 A1.) Foo in view of Feldmaier is discussed above and does not disclose a plug-in processor. Skoffjanec teaches such a processor (Figure 1) and teaches that such a module provides the benefit of coding the module so that inadvertent installation of the incorrect processor is avoided during installation (see paragraph [0003].) In view of the teaching of Skoffjanec, it would have been obvious to one having ordinary skill in the art at the time of the invention to include a plug-in module with the air bag system of Foo in view of Feldmaier in order to aid in installation and assure correct installation of the module.

Response to Arguments

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5. Applicant's arguments filed 10/12/2010 with respect to the drawing objection have been considered and are persuasive.

6. Applicant's arguments filed 10/12/2010 with respect to the prior art rejections have been fully considered but they are not persuasive. The Applicant argues that Foo teaches away from the claimed invention of having the processor and sensors separate, because "Foo specifically provides that each processor that evaluates the signal of the sensor is located **within the same module**" (Applicant's emphasis.) The Applicant points to Figure 1 and column 5, lines 36-39. The Applicant goes on to state that Foo teaches away from the claimed invention "by specifically instructing where the control module is to be located" The Examiner respectfully disagrees. There is no where that Foo speaks to the physical location of the processor 13 or module 12 directly. Figure 1 is a schematic diagram that can at most be considered to indicate the electronic/control connection. Additionally, the Applicant has misquoted the cited lines of Foo. Foo does not state that the processor is part of a module 12 "that is located at an interior location of the vehicle between the driver's and the passenger's sides of the vehicle at a substantially central location of the vehicle" The actual language of these lines is:

"...both **accelerometers 50, 52 associated with the central module 12 are located at an interior location of the vehicle between the driver's and the passenger's sides of the vehicle at a substantially central location of the vehicle.** That is that these

lines, which were cited by the Applicant as proof of the location of the central module, do not speak to the location of the central module, but rather the location of the accelerometers. The term "associated" could mean merely electronically associated,

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and a fair reading of the rest of the paragraph would indicate such, since Foo goes on to discuss that "The accelerometers could be mounted at other locations or as part of the central control unit 12 itself", which could reasonably be understood to mean that Foo has not specified the location of the central control unit, but offers this location as an alternative to the previously discussed mounting area for the accelerometers. It is the Examiner's position that Foo does not specifically disclose the location of the central control unit, and a person having ordinary skill would consider the prior art locations as reasonable areas for placement.

7. Regarding the Applicant's arguments with respect to the combination of Foo and Feldmaier. The Applicant argues that this combination is inappropriate because Feldmaier teaches the placement of a processor that evaluates acoustic signals, and so doesn't teach the location of a processor that evaluates inertial signals. The Examiner notes that Feldmaier is not relied on for the type of processor, but rather the location of the processor, Foo already provides the type of processor. The Applicant further argues that because Feldmaier is concerned with the location of the acoustic sensors, one skilled in the art would not look to the Feldmaier reference for the location of the processor. The Examiner respectfully disagrees. A person having ordinary skill would read Feldmaier and understand that the placement of the sensors is important, however the placement of the processor can be in other locations "passenger compartment, trunk, etc..." That is the placement of the processor is not important to the operation of the sensors. In summary, Foo does not teach, as the Applicant asserts, that the sensors and processor must be co-mounted, and in fact suggests that they don't. Foo is

also completely schematic regarding the location of the processor. Feldmaier teaches that it is known to mount processors in a variety of convenient locations, including the trunk. A person having ordinary skill would use the teaching of Feldmaier to obtain the predictable result of an easily accessible processor.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth Ilan whose telephone number is 571-272-6673. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-7742. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ruth Ilan
Primary Examiner
Art Unit 3616

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